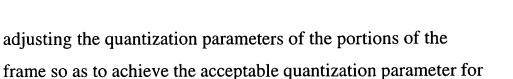Claims:

1. A method of implementing video bit-rate control comprising:

    applying different quantization step-sizes to different portions of a frame being encoded.

2. The method of claim 1, wherein the different portions of the frame comprise contiguous, nonoverlapping, equally sized portions.

3. The method of claim 1, wherein the quantization step-sizes are chosen based, at least in part, on the amount of variation in the pixel values of the particular portions of the frame.

4. The method of claim 3, wherein a measure of the variation in pixel values of the particular portions of the frame comprises sum of absolute differences (SAD).

5. The method of claim 3, wherein the quantization step-sizes are further chosen to substantially maintain a predetermined "bit budget."

6. A method of implementing video bit-rate control comprising:

    selecting an acceptable quantization parameter for a frame;

    selecting quantization parameters for portions of the frame based, at least in part, on the variation in pixel values of the particular portions of the frame; and

    adjusting the quantization parameters of the portions of the frame so as to achieve the acceptable quantization parameter for the frame.

7. The method of claim 6, wherein the quantization parameters of the portions of the frame are adjusted independently.

8. The method of claim 6, wherein the portions of the frame comprise contiguous, nonoverlapping, substantially equally sized portions.

9. The method of claim 8, wherein the portions comprise microblocks.

10. The method of claim 6, wherein the variation in pixel values of the particular portions of the frame is measured based, at least in part, on the sum of absolute differences (SAD).

11. The method of claim 6, wherein the acceptable quantization parameter for the frame is selected, based at least in part, on the variation in pixel values over the frame.

12. The method of claim 11, wherein the variation in pixel values over the frame is measured, at least in part, based on the sum of absolute differences (SAD).

13. An article comprising: a storage medium, said storage medium having stored thereon instructions, that, when executed result in: applying different quantization step-sizes to different portions of a frame being encoded.

14. The article of claim 13, wherein the instructions, when executed, apply the different quantization step-sizes to different portions of a

frame, the different portions comprising contiguous, nonoverlapping, substantially equally sized portions.

15. The article of claim 14, wherein the instructions, when executed, apply the different quantization step-sizes to different portions of a frame, the different portions comprising macroblocks.

16. The article of claim 13, wherein the instructions, when executed, result in the quantization step-sizes being chosen based, at least in part, on the amount of variation in the pixel values of the particular portions of the frame.

17. The article of claim 16, wherein the instructions, when executed, measure the variation in pixel values of the particular portions of the frame based, at least in part, on the sum of absolute differences (SAD).

18. The article of claim 17, wherein the instructions, when executed, result the quantization step-sizes being further chosen to substantially maintain a predetermined "bit budget."

19. An article comprising: a storage medium, having stored thereon instructions that, when executed implement video bit-rate control by:
    selecting an acceptable quantization parameter for a frame;
    selecting quantization parameters for portions of the frame based, at least in part, on the variation in pixel values of the particular portions of the frame; and

adjusting the quantization parameters of the portions of the frame so as to achieve the acceptable quantization parameter for the frame.

20. The article of claim 19, wherein the instructions, when executed, further result in the quantization parameters of the portions of the frame being adjusted independently.

21. The article of claim 19, wherein the instructions, when executed, further result in the variation in pixel values of the particular portions of the frame being measured based, at least in part, on the sum of absolute differences (SAD).

22. The article of claim 19, wherein the instructions, when executed, further result in the acceptable quantization parameter for the frame being selected, based at least in part, on the variation in pixel values over the frame.

23. The article of claim 22, wherein the instructions, when executed, further result in the variation in pixel values over the frame being measured, at least in part, based on the sum of absolute differences (SAD).